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Examiner:

Phone:

From: Daniel M. Cavanagh
Reg No. 41,661

Re: Application No. 10/721,910; Filed November 24, 2003
Entitled METHOD OF OVERTONE SELECTION AND LEVEL CONTROL
IN AN INTEGRATED CIRCUIT CMOS NEGATIVE RESISTANCE
OSCILLATOR TO ACHIEVE LOW JITTER

File: 51592/DMC/V165

I HEREBY CERTIFY THAT THIS PAPER IS BEING FACSIMILE TRANSMITTED TO
THE UNITED STATES PATENT AND TRADEMARK OFFICE ON August 25, 2004.

Renne M.F. Wyzykowski
Renne M.F. Wyzykowski

*Correspondence: Petition to Correct Filing Receipt and Filing Date
Copy of Postcard (Exhibit A)
Copy of Express Mail Receipt (Exhibit B)
Copy of First Page of Application (Exhibit C)
Copy of Transmittal Letter (Exhibit D)
Copy of Filing Receipt

1079763.1

Christie, Parker & Hale, LLP
350 West Colorado Boulevard
Post Office Box 7068
Pasadena, CA 91109-7068
626-795-9900
Fax: 626-577-8800

confidential

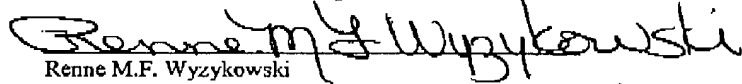
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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on August 25, 2004.


Renne M.F. Wyzykowski

Applicant : Raymond B. Patterson, et al. Confirmation No. 6287
Application No. : 10/721,910
Filed : November 24, 2003
Title : METHOD OF OVERTONE SELECTION AND LEVEL CONTROL IN
AN INTEGRATED CIRCUIT CMOS NEGATIVE RESISTANCE
OSCILLATOR TO ACHIEVE LOW JITTER
Grp./Div. : 2816
Examiner : Not Assigned
Docket No. : 51592/DMC/V165
Customer No. : 23363

PETITION TO CORRECT FILING RECEIPT AND FILING DATE

Mail Stop Missing Parts
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Post Office Box 7068
Pasadena, CA 91109-7068
August 25, 2004

Applicant has now become aware that the filing receipt for the application indicates an incorrect filing date and respectfully petitions to correct the filing date for the above-identified application. This application was filed by Express Mail on November 24, 2003. As evidence of the correct filing date, Applicant submits herewith a copy of the postcard (Exhibit A), a copy of the Express Mail Receipt (which has a Date In date of November 24, 2003) (Exhibit B), a copy of the first page of the application indicating Express Mail No. EV 327292141 US (Exhibit C), and a copy of the transmittal letter (Exhibit D).

Applicant Petitions to have the filing date corrected to be November 24, 2003, and requests that applicant be provided a corrected filing receipt indicating same. The Commissioner is hereby authorized to charge Deposit Account No. 03-1728 for any fees which may be required in this connection.

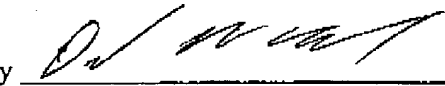
Application No. 10/721,910

A Corrected Filing Receipt indicating that this application has been assigned the filing date of November 24, 2003 is respectfully requested.

Respectfully submitted,

CHRISTIE, PARKER & HALE, LLP

By



Daniel M. Cavanagh
Reg. No. 41,661
626/795-9900

DMC/rmw

Enclosure: Acknowledgement Postcard
Express Mail Receipt
First Page of Application
Transmittal Letter
Filing Receipt

RMW IRV1079740.1 - *08/25/04 9:01 AM

**FEE TRANSMITTAL
UTILITY PATENT APPLICATION**

DATE: November 24, 2003

Docket No. : 51592/DMC/V165
 Inventor(s) : Raymond B. Patterson III; Randy T. Heilman
 Title : METHOD OF OVERTONE SELECTION AND LEVEL
 CONTROL IN AN INTEGRATED CIRCUIT CMOS
 NEGATIVE RESISTANCE OSCILLATOR TO ACHIEVE
 LOW JITTER

Duplicate

FEE DETERMINATION

CLAIMS AS FILED					
	NUMBER FILED	NUMBER EXTRA	SMALL ENTITY RATE	LARGE ENTITY RATE	FEE
TOTAL CLAIMS	20 - 20	= 0	x \$9.00	0 x \$18.00	-0-
INDEPENDENT CLAIMS	3 - 3	= 0	x \$43.00	0 x \$86.00	-0-
MULTIPLE-DEPENDENT CLAIMS FEE			\$145.00	\$290.00	-0-
BASIC FEE			\$385.00	\$770.00	\$770
TOTAL FILING FEE					\$770
List Independent Claims: 1, 12, 17					

METHOD OF PAYMENT

 X No filing fee enclosed.

 X No Deposit Account Authorization.

Respectfully submitted,

CHRISTIE, PARKER & HALE, LLP

By 

Daniel M. Cavanagh
 Reg. No. 41,661
 626/795-9900

DMC/rmw

RMW IRV1072081.1-11/24/03 2:57 PM



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APPL NO.	FILING OR 371 (c) DATE	ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO.	DRAWINGS	TOT CLMS	IND CLMS
10/721,910	11/26/2003	2816	0.0	51592 MCV/165	8	20	3

MAR 02 2004

CONFIRMATION NO. 6287

CHRISTIE, PARKER & HALE, LLP
 P.O. BOX 7068
 PASADENA, CA 91109-7068

Christie, Parker & Hale, LLP

FILING RECEIPT



OC000000011984659

Date Mailed: 02/27/2004

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Filing Receipt Corrections, facsimile number 703-746-9195. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

Raymond B. Patterson III, Melbourne, FL;
 Randy T. Heilman, Palm Bay, FL;

V165:
 51592
 CASE # ACTION
 REMINDER DUE DATE
 DEADLINE

Domestic Priority data as claimed by applicant

This application is a CON of 10/346,557 01/16/2003 ABN
 which is a CON of 10/163,860 06/05/2002 ABN
 which claims benefit of 60/296,321 06/05/2001

Foreign Applications

If Required, Foreign Filing License Granted: 02/26/2004

Projected Publication Date: To Be Determined - pending completion of Missing Parts

Non-Publication Request: No

Early Publication Request: No

Title

Method of overtone selection and level control in an integrated circuit CMOS negative resistance oscillator to achieve low jitter

Preliminary Class

327

**LICENSE FOR FOREIGN FILING UNDER
Title 35, United States Code, Section 184
Title 37, Code of Federal Regulations, 5.11 & 5.15**

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IN THE U.S. PATENT AND TRADEMARK OFFICE

APPLICATION

Title: **Method of Overtone Selection and Level Control in an Integrated Circuit CMOS**Client ID **NEW V165**

Negative Resistance Oscillator to Achieve Low Jitter

Case No **51592**Priority Claimed? **YES**Atty/Sec **ERIC TWE**

Assignment Enclosed (List Assignee)

Date Mailed **Nov. 24, 2003**Express Mail No. **EV3272921410S**Check(s) **NONE**Checked by: **W. Ben**

Transmittal Letter(s)

Patent Mark:
3 pgs in dup.

Application (No. of Pages)

27 pages

Declaration & Pwr of Atty

COPY

Included

Informal/Formal Drawings

8 sheets

3 Specimens/Photos/Facsimiles

N/A

Small Entity Declaration

N/A

Info Disc Stmt/PTO-1449

N/A

Petition Extension of Time

N/A**FOR Preliminary Amendments (3 pgs.)**

OTHER Copy of Petition for

Extension of Time in Parent Case **49577**

Applicant Use Only

PATENT: **ORD****PRO****PCT****ORP****CPP****DIV****CON****CIP****REI****REX OF****DOCKET****49577**MARK: **TM****SM****TM/SM****COLL****CERT****ITU****44d****44e****DIV**DOCKET: **Y/N****Standard****Y FOR REV****Y FOR DEADLINE****Parent Case****FOR REV/DEADLINE**

REV2 5/94 FORM Postcard

Exhibit A



EV 327292191 US



UNITED STATES POSTAL SERVICE®

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Label T-1-F June 2002

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Date In 11 24 03	<input checked="" type="checkbox"/> 12 Noon <input type="checkbox"/> 3 PM	Postage \$		Delivery Attempt Mo. Day	Time <input type="checkbox"/> AM <input type="checkbox"/> PM	Employee Signature	
Time In 2046	Military <input type="checkbox"/> AM <input type="checkbox"/> PM	Return Receipt Fee		Delivery Date Mo. Day	Time <input type="checkbox"/> AM <input type="checkbox"/> PM	Employee Signature	
Weight 11 lbs.	Int'l Alpha Country Code	COD Fee	Insurance Fee	<input type="checkbox"/> WAIVER OF SIGNATURE requested (which delivery to be made without obtaining signature of addressee or addressee's agent or delivery employee. If used, the sender assumes liability for delivery location) and I authorize that delivery employee's signature be retained yield point of delivery.			
No Delivery <input type="checkbox"/> Weekend <input type="checkbox"/> Holiday	Acceptance Mark Initials ADS	Total Postage & Fees \$ 13.65		<input type="checkbox"/> NO DELIVERY <input type="checkbox"/> Weekend <input type="checkbox"/> Holiday			
CUSTOMER USE ONLY METHOD OF PAYMENT: Express Mail Corporate Acct. No.				Federal Agency Acct. No. or Postal Service Acct. No.			
FROM: (PLEASE PRINT) CHRISTIE PARKER & HALL 3301 JAMBUKEE RD STE 6000 NORTH TOWN NEWPORT BEACH CA 92660-2960 VI65:51592:DNC:TEW				TO: (PLEASE PRINT) CALL STOP PAYMENT APPLICATION COMMISSIONER FOR PATENTS PG BOX 1450 ALEXANDRIA VA 22310-1450			
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45427/JFO/V165

METHOD OF OVERTONE SELECTION AND LEVEL CONTROL
IN AN INTEGRATED CIRCUIT CMOS NEGATIVE RESISTANCE
OSCILLATOR TO ACHIEVE LOW JITTER

5 CROSS-REFERENCE TO RELATED APPLICATIONS

This application claims the benefit of U.S. Provisional Application, No. 60/296,321, filed June 5, 2001, the disclosure of which is incorporated by reference.

BACKGROUND

10 The present invention generally relates to generating clock pulses and in particular to generating a stable high-speed clock pulse train by employing a negative resistance oscillator operating at an overtone frequency of a resonator.

Applications such as communications, video processing, data
15 acquisition and recovery, and high-bandwidth test systems require stable high frequency clocks to meet specific performance demands and provide periodic and accurately spaced signals. Most clocks include an electronic device, e.g., an oscillator, to generate an accurate oscillating signal. This
20 signal oscillation is based on a periodic event that, under the control of a resonator, repeats at a natural and substantially constant rate, i.e., a fundamental or resonance frequency.

Stability is an inherent property that determines how well
an oscillator can produce the same frequency over a given time
25 interval. The more stable the oscillator, the more accurately the fundamental frequency is produced, and the less variations there will be in signal characteristics. Additionally, quality factor, or Q, is another inherent oscillator quality that influences stability. In general, oscillators having a high
30 quality factor tend to be more stable, experience fewer signal

Express Mail No. EV327292141US

UTILITY PATENT APPLICATION TRANSMITTAL
(Only for new nonprovisional applications under 37 CFR 1.53(b))

Docket No. : 51592/DMC/V165
Inventor(s) : Raymond B. Patterson III; Randy T. Heilman
Title : METHOD OF OVERTONE SELECTION AND LEVEL CONTROL
IN AN INTEGRATED CIRCUIT CMOS NEGATIVE RESISTANCE
OSCILLATOR TO ACHIEVE LOW JITTER
Express Mail Label No. : EV 327292141 US

ADDRESS TO: Mail Stop Patent Application
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

November 24, 2003

1. ☒ **FEE TRANSMITTAL FORM** *(Submit an original, and a duplicate for fee processing).*

2. **IF A CONTINUING APPLICATION**

☒ This application is a continuation of patent application No. 10/346,557, filed January 16, 2003 which is a continuation of patent application No. 10/163,860, filed June 5, 2002.

Prior application information: Examiner Not Assigned; Group Art Unit: 2817.

☒ This application claims the benefit of Provisional Application No. 60/296,321, filed June 5, 2001 pursuant to 35 U.S.C. §119(e) and 37 CFR §1.78(a)(4).

3. **APPLICATION COMPRISED OF**

Specification

27 Specification, claims and Abstract (total pages)

Drawings

8 Sheets of formal drawing(s) (FIGS. 1 to 8)

Declaration and Power of Attorney

 Newly executed

 Unexecuted declaration

☒ Copy from a prior application (37 CFR 1.63(d))(for continuation and divisional)
(UNEXECUTED)

4. **Microfiche Computer Program** *(Appendix)*

5. **Nucleotide and/or Amino Acid Sequence Submission** *(if applicable, all necessary)*

 Computer Readable Copy

 Paper Copy (identical to computer copy)

 Statement verifying identity of above copies

UTILITY PATENT APPLICATION TRANSMITTAL**(Only for new nonprovisional applications under 37 CFR 1.53(b))****Docket No.: 51592/DMC/V165**

6. APPLICANT(S) STATUS UNDER 37 CFR §1.27

☐ Applicant(s) and any others associated with it/them under §1.27(a) are a SMALL ENTITY

7. ALSO ENCLOSED ARE

- ☐ Request and Certificate under 35 U.S.C. §122(b)(2)(B)(i) **Request for Non-Publication**
- ☒ Preliminary Amendment
- ☒ Includes "Cross-Reference to Related Applications"
- ☒ A copy of the Petition for Extension of Time for the parent application is enclosed
- ☐ An Assignment of the invention with the Recordation Cover Sheet and the recordation fee are enclosed
- ☐ This application is owned by pursuant to an Assignment recorded at Reel , Frame
- ☐ Information Disclosure Statement (IDS)/PTO/SB/08A/B
- ☐ Copies of IDS Citations
- ☐ Certified copy of Priority Document(s) (if foreign priority is claimed)
- ☐ English Translation Document (if applicable)
- ☒ Return Receipt Postcard (MPEP 503) (should be specifically itemized).
- ☐ Other:

8. CORRESPONDENCE ADDRESS**CHRISTIE, PARKER & HALE, LLP, P.O. BOX 7068, PASADENA, CA 91109-7068****Customer Number: 23363**

Respectfully submitted,

CHRISTIE, PARKER & HALE, LLP

By 

Daniel M. Cavanagh

Reg. No. 41,661

626/795-9900

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